

Chowan River and Dismal Swamp Basins

Cause Group Code: K01R-01-BEN Middle Meherrin River

Location: Middle Meherrin River from its headwaters to its confluence with Crupper Run.

City / County: Lunenberg Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Station ID: 2-MMR008.77 IM - 2012 Bio

Sediment metrics are moderate to low. Filterer FFG dominates spring and fall samples indicating possible nutrient enrichment.

Middle Meherrin River

Aquatic Life

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

11.25

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K01R-03-BEN Finneywood Creek

Location: Finneywood Creek from its headwaters to its mouth on the South Meherrin River

City / County: Mecklenburg Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Station ID:

5AFNY004.78 (2005 Probmon)

Impaired Benthic Assessment - Stream runs through a pasture with active cattle access. Flow was minimal, sedimentation was extensive, organic solids were abundant in channel. Minimal habitat present.

Finneywood Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

5.11

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K02R-01-BEN North Meherrin River

Location: North Meherrin River from Couches Creek to unnamed tributary below unimproved road.

City / County: Lunenberg Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Station ID:

5ANMR007.90 (Bio) 2008-2012 Bio - IM Tied to 2002 FPM

This is a large incised stream with high sediment deposition that appears to flood often. Habitat is sparse and consists mostly of snags, and banks are moderately stable. Water was low for fall 2010 sample. Additional samples in 2012 indicate limited habitat may prevent a balanced community.

5ANMR013.95 (2008 Bio)

IM - This section of the North Meherrin River has incised banks and a high rate of sedimentation. Cobble surfaces in riffles were dominated by periphyton.

North Meherrin River

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

10.17

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins Cause Group Code: K02R-03-BEN Kits Creek

Location: Kits Creek from its headwaters to the mouth

City / County: Lunenberg Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Station ID:

5AKIT000.67 (TMDL Monitoring)

2012/2014 Bio

FS - Kits Creek exhibits seasonal variability around the assessment threshold but fall scores show the stream is capable of supporting a healthy aquatic community. This site will be monitored in the future due to this fluctuation.

5AKIT002.65 (Probmon/2011/2013 Bio)

Impaired Benthic Assessment - Limited instream habitat consisted of riffles dominated by bedrock. Excellent riparian zone. Reach may be subject to storm scour due to prevalence of bedrock substrate.

Kits Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

4.82

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K02R-04-BEN Couches Creek

Location: Couches Creek from its headwaters to its mouth on the North Meherrin River

City / County: Lunenberg Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Station ID:

5ACHS003.42 (Ambient)

2008 Bio

IM - Cobble riffles were partially embedded. Periphyton was abundant.

5ACHS006.33 (Special Study, Bio)

2008 Ammonia Study

Station located downstream of Victoria West Lagoon. Single violation of the chronic ammonia std

2008-2010 Bio

IM - Couches Creek at this site had marginal habitat with a high rate of sediment deposition. Black fluffy material was present throughout stream.

Couches Creek Estuary Reservoir River

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

(Miles) 7.37

(Sq. Miles)

(Acres)

Sources:

Aquatic Life

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K02R-04-PH Couches Creek

Location: Couches Creek from its headwaters to its mouth on the North Meherrin River.

City / County: Lunenberg Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5A

Station ID:

5ACHS006.33 (Ambient) pH - 2/18 Violation Rate

Couches Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

7.37

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K02R-05-DO Ledbetter Creek

Location: Ledbetter Creek from its headwaters to its mouth.

City / County: Lunenberg Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

Station ID:

5ALDB000.03 (Ambient)

Dissolved Oxygen - 2/12 Violation Rate

Ledbetter Creek

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Outgoon Discoluted Total Impaired Size by Water Type:

Oxygen, Dissolved - Total Impaired Size by Water Type:

9.08

Sources:

Source Unknown



15.99

Chowan River and Dismal Swamp Basins

Cause Group Code: K03R-01-BEN Flat Rock Creek

Location: Flat Rock Creek from headwaters to the confluence of Kettlesticks Creek.

City / County: Lunenberg Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Station ID:

5AFRC011.93 (2012 Probmon)

IM - Beaver activity and sedimentation from within the watershed has limited habitat availability.

Flat Rock Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

Sources:

Source Unknown



8.05

Chowan River and Dismal Swamp Basins

Cause Group Code: K03R-06-BEN Mason Creek

Location: Mason Creek from its headwaters to the mouth.

City / County: Lunenberg Co. Mecklenburg Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Station ID:

5AMSC002.30 (Ambient/Bio)

IM - 2011/2014 Bio

Habitat scores and Taxa lists indicated habitat was a limiting factor in Masons Creek in 2011. This site was more wadeable in 2014 and better habitat was accessible further upstream. Masons Creek will continue to be monitored in order to accurately characterize the benthic community.

Mason Creek

Estuary Reservoir River

Aquatic Life

(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K05R-05-DO Hays Creek

Location: The mainstem of Hayes Creek.

City / County: Brunswick Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2010 cycle, Hays Creek was assessed as not supporting of the Aquatic Life Use due to a dissolved oxygen exceedance rate of 2/11 at 5AHAY000.38, which is located at the Route 686 bridge.

During the 2016 cycle, Hays Creek was assessed as not supporting of the Aquatic Life Use due to a dissolved oxygen violation rate of 2/12 at 5AHAY000.38

Hays Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

6.39

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K05R-06-BEN Little Genito Creek

Location: Headwaters to mouth at Genito Creek.

City / County: Brunswick Co. Mecklenburg Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

During the 2010 cycle, Little Genito Creek was assessed as not supporting of the Aquatic Life Use due to benthic impairment at 2008 probabilistic monitoring station 5ALTG001.50.

Little Genito Creek

Estuary Reservoir River

Aquatic Life

(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

12.05

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins Cause Group Code: K07R-03-BEN Rocky Run

Location: Rocky Run and its tributaries, including Sandy Branch.

City / County: Brunswick Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

During the 2008 cycle, Rocky Run was assessed as impaired of the Aquatic Life Use due to a benthic impairment at freshwater probabilistic monitoring station 5ARYR001.23.

Additional monitoring occurred during the 2014 cycle, both at station 5ARYR001.23 and at station 5ARYR000.62, which is located at Rt. 642. There is severe impairment at both stations.

Rocky Run

Aquatic Life

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

Estuary (Sq. Miles)

(Acres)

River (Miles)

21.27

Sources:

Source Unknown

Final 2016



Chowan River and Dismal Swamp Basins

Cause Group Code: K08L-01-HG Emporia Lake (Meherrin Reservoir)

Location: Emporia Lake

City / County: Greensville Co.
Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

In 2007 the lake had fish tissue monitoring with Mercury in 3 species (Chain Pickerel, Largemouth Bass and Redear Sunfish.

Emporia Lake (Meherrin Reservoir)

Fish Consumption (Sq. Miles)

es) (Acres)

Estuary

River (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

263.68

Reservoir

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K08L-02-CHLA Brunswick Lake

Location: Brunswick Lake
City / County: Brunswick Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Chlorophyll-a / 5A

During the 2016 cycle the segment became impaired for Chlorophyll a with 2/3 violations.

Brunswick Lake Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

Chlorophyll-a - Total Impaired Size by Water Type: 160.33

Sources:

Agriculture



Chowan River and Dismal Swamp Basins

Cause Group Code: K08L-02-DO **Brunswick Lake**

Location: Brunswick Lake City / County: Brunswick Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

In 2006 Brunswick Lake was assessed as not supporting the Aquatic Life Use due to low dissolved oxygen in bottom waters. The low DO only occurred during periods of stratification, however the TSIs for the lake were above 60:

TSI(TP) = 64TSI(CA) = 69TSI(SD) = 66

Therefore the low dissolved oxygen was considered to be exacerbated by excessive nutrients and a TMDL was required. In addition, both total phosphorus and chlorophyll a were considered observed effects b/c of screening level exceedances. The lake should be reevaluated once nutrient criteria are established.

For the 2008 cycle nutrient criteria was developed for lakes and DO was no longer impaired. Only pH was impaired at 5ARDC007.30 with a violation rate of 5/36.

In the 2012 cycle the segment was listed as impaired for aquatic life use with a DO violation rate of 7/37 at station 5ARDC007.30.

During the 2014 cycle there was no new data so the impairments remain.

During the 2016 cycle the segment was impaired for DO with a violation rate of 7/56 at 5ARDC007.30 and 9/47 at 5ARDC008.50.

Brunswick Lake Estuary Reservoir River (Sq. Miles) (Acres) (Miles) **Aquatic Life** 160.33

Oxygen, Dissolved - Total Impaired Size by Water Type:

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K08R-03-BAC Wilson Creek

Location: Wilson Creek from its beginning at the confluence of Dukes Branch and Huckleberry Branch to its mouth at Brunswick Lake.

City / County: Brunswick Co. Greensville Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2012 cycle, Wilson Creek was impaired of the Recreation Use due to an E. coli exceedance rate of 2/12 at 5AWIL002.42, which is located at the Route 712 bridge. The violation rate was 7/24 during the 2014 and 2016 cycle.

Wilson Creek

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

2.74

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Wilson Creek Cause Group Code: K08R-03-BEN

Location: Wilson Creek from its beginning at the confluence of Dukes Branch and Huckleberry Branch to its mouth at Brunswick Lake.

City / County: Brunswick Co. Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

During the 2010 cycle, Wilson Creek was assessed as not supporting of the Aquatic Life Use due to impairment of the benthic community at 5AWIL002.42, which is located at Rt. 712. Additional monitoring during the 2014 cycle showed an acceptable benthic community; therefore, the stream should be delisted.

During the 2016 cycle the segment was relisted and impaired for Benthics.

Wilson Creek **Estuary** Reservoir River (Sq. Miles) (Acres) (Miles) **Aquatic Life** 2.74

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

Sources:

Non-Point Source



Chowan River and Dismal Swamp Basins

Cause Group Code: K08R-04-BAC UT to Dukes Branch

Location: Headwaters to the mouth at Dukes Branch
City / County: Brunswick Co. Greensville Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment was impaired for Recreation use due to an E.coli violation rate of 3/10.

UT to Dukes Branch

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 1.71

Sources:

Non-Point Source



Chowan River and Dismal Swamp Basins

Cause Group Code: K08R-05-BAC Dukes Branch

Location: Headwaters to the mouth

City / County: Brunswick Co. Greensville Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment was impaired for Recreation use due to an E.coli violation rate of 4/12.

Dukes Branch

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 2.41

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K09R-01-BAC Meherrin River

Location: The Meherrin River from the Emporia Reservoir Dam to the Route 730 bridge

City / County: Emporia City

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment became impaired for recreation use. Station 5AMHN026.54 had a 2/12 violation rate and station 5AMHN052.34 had a 4/36 violation rate for E.coli.

Meherrin River

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

26.75

Sources:

Non-Point Source



Chowan River and Dismal Swamp Basins

Cause Group Code: K09R-01-HG Meherrin River, Fontaine Creek, Mill Swamp

Location: Meherrin River below Emporia Reservoir Dam to the state line, including its tributaries Fontaine Creek up to I-95 bridge

crossing and Mill Creek up to I-95 bridge crossing

City / County: Emporia City Greensville Co. Southampton Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

On 12/13/2004, the Virginia Department of Health issued a fish consumption advisory due to mercury in gizzard shad. The advisory includes the Meherrin River from below the Emporia dam downstream ~28 miles to the Route 730 bridge. In addition, on 9/16/2008, they issued an advisory for bowfin and largemouth bass from Emporia Reservoir dam to the state line, including the tributaries Fontaine Creek and Mill Swamp up to the I-95 bridge crossings.

The segments will be considered impaired of the Fish Consumption Use. The advisory was based on mercury exceedances at DEQ monitoring stations 5AMHN026.54, 5AMHN051.43, 5AFON006.07, and 5AMLS001.42.

Meherrin River, Fontaine Creek, Mill Swamp

Fish Consumption

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

67.74

Sources:

Atmospheric Deposition -

Source Unknown

Toxics



Chowan River and Dismal Swamp Basins

Cause Group Code: K09R-01-PCB Meherrin River

Location: The Meherrin River from the Emporia Reservoir Dam to the Route 730 bridge

City / County: Emporia City
Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

During the 2004 cycle, the Meherrin River from the Emporia Reservoir dam downstream approximately 5 miles was assessed as not supporting the Fish Consumption Use due to PCBs in fish tissue in two samples at station 5AMHN051.43. During the 2006 cycle, VDH issued a fish consumption advisory for PCBs from the Emporia dam to the Route 730 bridge (12/13/2004). The segment was extended to match the advisory. The TMDL due date for PCBs is 2016.

Meherrin River

Fish Consumption

PCB in Fish Tissue - Total Impaired Size by Water Type:

Estuary Reservoir (Miles)

River (Miles)

River (Miles)

26.75

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K10R-01-DO Rattlesnake Creek

Location: Rattlesnake Creek mainstem from headwaters to its mouth at Fontaine Creek

City / County: Brunswick Co. Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2010 cycle, Rattlesnake Creek from Edwards Creek to its mouth was assessed as not supporting of the Aquatic Life Use due to dissolved oxygen exceedances at several stations in the segment. The impairment was extended upstream in the 2012 cycle. During the 2014 cycle, the exceedance rates were as follows:

1/10 at 5ARSK000.23 4/24 at 5ARSK003.08 6/12 at 5ARSK006.97 4/12 at 5ARSK009.28 2/10 at 5ARSK011.59

During the 2016 cycle the segment remained impaired for Aquatic Life Use due to Dissolved oxygen exceedances at two stations 5ARSK006.97 and 5ARSK009.28.

Rattlesnake Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

17.18

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2016



Chowan River and Dismal Swamp Basins

Cause Group Code: K10R-02-DO Fontaine Creek (Fountains Creek)(Partial delist16 .56 miles)

Location: Fontaine Creek mainstem from Rattlesnake Creek to the confluence with tributary XGV

City / County: Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2010 cycle, Fontaine Creek from Rattlesnake to the confluence with tributary XGV was assessed as not supporting of the Aquatic Life Use due to dissolved oxygen exceedances throughout the segment.

3/9 at 5AFON039.47 3/25 at 5AFON037.89 5/12 at 5AFON033.05 3/12 at 5AFON027.33

During the 2016 cycle the segment was impaired for Aquatic life use due to an impairment of DO at station 5AFON039.47 with a violation rate of 2/12. The length of the impairment was reduced by .56 miles.

Fontaine Creek (Fountains Creek)(Partial delist16 .56 miles)

Aquatic Life

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

16.64

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2016



Chowan River and Dismal Swamp Basins

Cause Group Code: K10R-03-DO Quarrel Creek

Location: Quarrel Creek mainstem from White Oak Creek to its mouth.

City / County: Brunswick Co. Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2010 cycle, Quarrel Creek was assessed as not supporting of the Aquatic Life Use due to dissolved oxygen violations at 5AQRL000.54, which is located at Rt. 602. The violation rate was 5/12 during the 2012 cycle. No additional data has been collected.

During the 2016 cycle the segment remained impaired for Aquatic life use due to dissolved oxygen violations at 5AQRL000.54 with a violation rate of 6/24.

Quarrel CreekEstuaryReservoirRiverAquatic Life(Sq. Miles)(Acres)(Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 3.34

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K10R-03-PH Quarrel Creek

Location: Quarrel Creek mainstem from White Oak Creek to its mouth.

City / County: Brunswick Co. Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

During the 2016 cycle the segment remained impaired for Aquatic life use due to pH with a violation rate of 3/24.

Quarrel CreekEstuaryReservoirRiverAquatic Life(Sq. Miles)(Acres)(Miles)

pH - Total Impaired Size by Water Type: 3.34

Sources:

Natural Sources



Chowan River and Dismal Swamp Basins

Cause Group Code: K10R-04-DO Beddingfield Creek

Location: Beddingfield Creek from Mason Branch to its mouth at Fontaine Creek.

City / County: Brunswick Co. Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2010 cycle, Beddingfield Creek was assessed as not supporting of the Aquatic Life Use due to dissolved oxygen violations at 5ABDD000.69, which is located at Rt. 600. The violation rate was 5/11 during the 2012 cycle.

During the 2016 cycle the segment was assessed as not supporting of the Aquatic Life Use due to dissolved oxygen violations at 5ABDD000.69 with a violation rate of 5/12.

Beddingfield Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 4.18

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K10R-06-PH Rocky Run

Location: Rocky Run from the Doyle Lake dam to its mouth at Fontaine Creek.

City / County: Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

Rocky Run was assessed as not supporting of the Aquatic Life Use in the 2010 cycle due to a pH exceedance rate of 2/12 at 5ARCY000.90, which is located at Route 604.

During the 2016 cycle the segment remained impaired for Aquatic life use due to pH violation of 2/12.

Rocky Run Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

0.86

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K11R-04-DO Fontaine Creek

Location: Fontaine Creek from the I-95 bridge to the Route 301 bridge.

City / County: Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2012 cycle, Fontaine Creek from I-95 to Route 301 was assessed as impaired of the Aquatic Life Use due to a dissolved oxygen violation rate of 3/22 at 5AFON014.38. Continued monitoring was recommended due to the low violation rate and an acceptable violation rate at 5AFON016.90 (0/2.) The exceedance rate increased to 4/24 during the 2014 cycle and 2/24 during the 2016 cycle.

Fontaine Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

7.30

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2016



Chowan River and Dismal Swamp Basins

Cause Group Code: K11R-05-DO **Beaverpond Creek**

Location: The mainstem of Beaverpond Creek within Virginia.

City / County: Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2010 cycle, Beaverpond Creek was assessed as not supporting of the Aquatic Life Use due to dissolved oxygen exceedances. The violation rates during the 2012 cycle were as follows:

3/12 at 5ABVC000.48 2/12 at 5ABVC002.31

During the 2016 cycle the segment remained impaired for the aquatic life use due to exceedances in DO.

Beaverpond Creek Estuary Reservoir River (Sq. Miles) (Acres) (Miles) **Aquatic Life** 3.35

Oxygen, Dissolved - Total Impaired Size by Water Type:

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K11R-06-PH XGV - Fontaine Creek, UT

Location: Headwaters to mouth City / County: Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

XGV was assessed as not supporting of the Aquatic Life Use in the 2010 cycle due to a pH exceedance rate of 3/7 at 5AXGV000.92.

XGV - Fontaine Creek, UT

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

1.95

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2016



Chowan River and Dismal Swamp Basins

Cause Group Code: K11R-08-DO XGU - Fontaine Creek, UT

Location: Headwaters to mouth City / County: Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

XGU was assessed as not supporting of the Aquatic Life Use in the 2010 cycle due to a dissolved oxygen exceedance rate of 9/12 at 5AXGU000.35, which is located at frontage road F-128.

During the 2016 cycle the segment was assessed as not supporting of the Aquatic Life Use due to a dissolved oxygen violation rate of 4/11 at 5AXGU000.35

XGU - Fontaine Creek, UT

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Aquatic Life (Sq. Miles) (Acres) (Miles)
Oxygen, Dissolved - Total Impaired Size by Water Type: 1.82

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K11R-08-PH XGU - Fontaine Creek, UT

Location: Headwaters to mouth City / County: Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

XGU was assessed as not supporting of the Aquatic Life Use in the 2010 cycle due to a pH exceedance rate of 6/12 at 5AXGU000.35, which is located at frontage road F-128.

During the 2016 cycle the segment was assessed as not supporting of the Aquatic Life Use due to a pH violation rate of 9/11 at 5AXGU000.35

XGU - Fontaine Creek, UT

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

1.82

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K13R-04-BAC Flat Swamp

Location: This cause encompasses the are downstream of the confluence of Bellyache Swamp and Frank's Branch extending

downstream to its confluence with Tarrara Creek.

City / County: Southampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Impairment is retained for Recreational Use based on Fecal Coliform data (2 viol / 8 obs) for 2004 303d, since no new data (E.coli) for the 2010 Assessment cycle was collected. Previous listing of impairment will be upheld.

Flat Swamp

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 8.48

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K14L-02-BAC Nottoway Falls Lake

Location: Nottoway Falls Lake

City / County: Lunenberg Co. Nottoway Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Station ID:

5ANTW143.06 (2007/2011-2012 Nottoway Falls Lake)

E. coli - 2/14 Violation Rate

Nottoway Falls Lake

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 32.19

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K14L-02-DO Nottoway Falls Lake

Location: Nottoway Falls Lake

City / County: Lunenberg Co. Nottoway Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

Station ID:

5ANTW143.06 (2007/2011-2012 Nottoway Falls Lake)

DO - 7/39 Violation Rate

Nottoway Falls Lake

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 32.19

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K14L-02-HG Nottoway Falls Lake

Location: Nottoway Falls Lake

City / County: Lunenberg Co. Nottoway Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

Station ID:

5ANTW143.06 (2007 FT Sampling)

Hg 2 Species

Nottoway Falls Lake
Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type: 32.19

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K14R-01-BEN Nottoway River

Location: Nottoway River from its confluence with Big Hounds Creek to its confluence with Little Nottoway River.

City / County: Lunenberg Co. Nottoway Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Station ID:

5ANTW134.52 (2007 Probmon)

IM - This section of the Nottoway River had very slow-moving water and limited habitat availability, mostly in the form of large woody debris. Sediment deposition in the river was relatively high and banks were marginally stable. The flow was low in the fall due to the drought.

Nottoway River

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 7.26

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K15L-01-HG Nottoway Pond

Location: Nottoway Pond
City / County: Nottoway Co.
Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

Station ID:

5ALZT000.12 (2007 FT Sampling)

Hg 2 Species

Nottoway Pond Estuary Reservoir River Fish Consumption (Sq. Miles) (Acres) (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type: 50.70

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K15R-03-DO Lazaretto Creek

Location: Lazaretto Creek from the headwaters of Crystal Lake to its headwaters.

City / County: Nottoway Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

Station ID:

5ALZT001.39 (Ambient)

Dissolved Oxygen - 2/12 Violation Rate

Lazaretto Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 4.97

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K15R-04-BEN Mallorys Creek

Location: Mallorys Creek from its headwaters to the mouth

City / County: Nottoway Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Station ID:

5AMLL000.03 (2012 Probmon)

IM - Sediment metrics scored moderate to low with the presence of beaver activity and filamentous algae.

5AMLL001.27 (2014 Bio)

IM - This is a small stream with eroded clay banks and excessive sedimentation. There is cattle access downstream of the

bridge.

Mallorys Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

7.11

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K16L-01-TP Fort Pickett Reservoir

Location: Fort Pickett Reservoir

City / County: Brunswick Co. Nottoway Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Phosphorus (Total) / 5A

Station IDs:

5ANTW127.14 (Lake Station) Lake treated with algaecides

Total Phosphorus - 2/3 Violation Rate (Median calculated from 3 sample years)

Fort Pickett Reservoir

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Phosphorus (Total) - Total Impaired Size by Water Type: 318.95

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K16R-04-BAC Nottoway River

Location: Nottoway River from Fort Pickett raw water intake to its confluence with Hurricane Branch.

City / County: Brunswick Co. Nottoway Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Station ID:

5ANTW126.94 (Ambient) E. coli - 2/12 Violation Rate

Nottoway River

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

3.39

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K16R-06-BAC Tommeheton Creek

Location: Tommeheton Creek from its headwaters to the backwaters of Tommeheton Lake.

City / County: Brunswick Co. Dinwiddie Co. Lunenberg Co. Nottoway Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Station ID:

5ATMT006.63 (Ambient) E coli - 2/12 Violation Rate

Tommeheton Creek Estuary Reservoir River

Recreation (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

7.84

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K16R-06-DO Tommeheton Creek

Location: Tommeheton Creek from its headwaters to the backwaters of Tommeheton Lake.

City / County: Brunswick Co. Dinwiddie Co. Lunenberg Co. Nottoway Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

Station ID:

5ATMT006.63 (Ambient)

Dissolved Oxygen - 4/12 Violation Rate

Tommeheton Creek

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

7.84

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K16R-07-BEN Seay Creek

Location: Seay Creek from its headwaters to it mouth on Crooked Creek.

City / County: Lunenberg Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Station ID:

5ASYC003.90 (2012 Bio)

IM - Seay Creek and its benthic community is limited by available habitat. Hardpan clay is dominant and banks show signs of frequent scouring events. Algae and brown floc observed in slower reached of the stream, indicating a potential for nutrient

Seay Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 7.48

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K17R-01-BAC Nottoway River

Location: The Nottoway River from Turkey Egg Creek to Sturgeon Creek.

City / County: Brunswick Co. Dinwiddie Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2010 cycle, the Nottoway River from Turkey Egg Creek to Sturgeon Creek was assessed as not supporting of the Recreation Use due to E. coli exceedances at the Route 1 bridge (5ANTW109.02). The violation rate was 7/36 during the 2014

cycle

During the 2016 cycle the segment remained impaired due to E.coli with a violation rate of 3/12 at station 5ANTW0113.13 and 9/41 at 5ANTW109.02.

Nottoway RiverEstuaryReservoirRiverRecreation(Sq. Miles)(Acres)(Miles)

Escherichia coli - Total Impaired Size by Water Type:

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9.99

Sources:

Source Unknown

Final 2016



Chowan River and Dismal Swamp Basins

Cause Group Code: K17R-02-BAC Waqua Creek

Location: Wagua Creek upstream of the Route 46 bridge

City / County: Brunswick Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Waqua Creek was initially assessed as not supporting of the Recreation Use goal during the 2002 cycle. In 2004, the impairment was based on fecal coliform exceedances at 5AWAQ020.52 (Route 617) and at 5AWAQ022.17 (private road). These stations were confined animal feeding operation (CAFO) special study stations.

There had been no additional monitoring since 2002, so the 2004 assessment was carried over. However, additional monitoring was conducted during the 2012 cycle. The impairment was confirmed due to an E. coli violation rate of 3/12 at 5AWAQ020.52 and the impairment was converted to E. coli.

Waqua Creek
Recreation
Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

3.57

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K17R-03-BAC Waqua Creek

Location: Wagua Creek from confluence with great branch to the mouth

City / County: Brunswick Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment was split from VAP-K17R_WAQ01A98 and was impaired for Recreation use due to an

E.coli violation rate of 2/12.

Waqua Creek
Recreation
Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

5.59

Sources:

Agriculture Non-Point Source Source Unknown



Chowan River and Dismal Swamp Basins Cause Group Code: K17R-04-BAC Great Creek

Location: Great Creek from the Headwaters to the mouth

City / County: Brunswick Co. Dinwiddie Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment was impaired for Recreation use due to exceedances in E.coli. The violation rate was 7/12.

Great Creek

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 5.45

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K17R-05-BAC Reedy Creek

Location: Reedy Creek from the Headwaters to the mouth

City / County: Brunswick Co. Dinwiddie Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment was assessed as not supporting the Recreation use due to an E.coli impairment with a

violation rate of 10/21.

Reedy Creek

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

6.02

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K17R-05-DO Reedy Creek

Location: Reedy Creek from the Headwaters to the mouth

City / County: Brunswick Co. Dinwiddie Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2016 cycle the segment was assessed as not supporting the Aquatic life use due do a DO impairment with violation

rate of 4/25.

Reedy Creek
Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

6.02

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K17R-06-BAC Turkey Egg Creek

Location: Turkey Egg Creek from the Headwaters to the mouth

City / County: Brunswick Co. Dinwiddie Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment was impaired for the Recreation use due to exceedances in E.coli. The violation rate was

6/12.

Turkey Egg Creek

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

5.64

Sources:

Non-Point Source



Chowan River and Dismal Swamp Basins

Cause Group Code: K17R-07-BAC Waqua Creek

Location: Wagua Creek downstream one mile of the Route 46 bridge

City / County: Brunswick Co. Dinwiddie Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment was not supporting for the Recreation use due to an E.coli violation rate of 2/12.

Waqua Creek
Recreation
Reservoir River
(Sq. Miles) (Acres) (Miles)

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Escherichia coli - Total Impaired Size by Water Type: 1.09

Sources:

Non-Point Source

Final 2016



Chowan River and Dismal Swamp Basins

Cause Group Code: K17R-07-DO Hickory Run

Location: Hickory Run from its headwaters to its mouth.

City / County: Brunswick Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

Station ID:

5AHCK000.96 (TMDL Station)

Dissolved Oxygen - 2/12 Violation Rate

Hickory Run

Estuary Reservoir River

Aquatic Life

(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

4.94

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K17R-07-PH Hickory Run

Location: Hickory Run from its headwaters to its mouth.

City / County: Brunswick Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

Station ID:

5AHCK000.96 (TMDL Station) pH - 2/12 Violation Rate

Hickory Run

Estuary Reservoir River

Aquatic Life

(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

4.94

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K18R-01-DO Sturgeon Creek

Location: The mainstem of Sturgeon Creek from its headwaters downstream to the confluence with Lloyds Run.

City / County: Brunswick Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

The dissolved oxygen violation rate at station 5ASTG013.22, which is located at the Route 1 bridge, was 2/12 during the 2014 cycle. Therefore, the segment is considered impaired of the Aquatic Life Use.

No new data has been collected since 2012 cycle

Sturgeon Creek **Estuary** Reservoir River (Sq. Miles) (Acres) (Miles) **Aquatic Life**

Oxygen, Dissolved - Total Impaired Size by Water Type:

12.96

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses

Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K19R-01-BAC Masons Branch

Location: Masons Branch from its headwaters to its mouth at Indian Creek.

City / County: Brunswick Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2012 cycle, Masons Branch was assessed as not supporting of the Recreation Use due to an E. coli exceedance rate of 2/17 at 5AMSN001.62, which is located at the Route 633 bridge.

During the 2016 cycle the segment was impaired for the Recreation use due to an E.coli exceedance rate of 2/11 at station 5AMSN003.24.

Masons Branch

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 4.89

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K19R-03-BAC Buckskin Creek

Location: Buckskin Creek from its headwaters to its mouth at the Nottoway River.

City / County: Dinwiddie Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Buckskin Creek was previously assessed as not supporting the Recreation Use goal based on a fecal coliform violations at the Route 609 bridge (5ABSK004.32).

Additional monitoring was conducted during the 2010 cycle. The impairment was confirmed and converted to E. coli due to a violation rate of 2/10. During the 2012 cycle, the violation rates were as follows:

2/12 at 5ABSK000.60 5/22 at 5ABSK004.32

3/12 at 5ABSK006.52

4/12 at 5ABSK007.40

2/12 at 5ABSK008.75

4/11 at 5ABSK011.17

During the 2016 cycle the segment remained impaired for Recreation Use due to E.coli violations at all stations.

Buckskin Creek		Estuary	Reservoir	River
Recreation		(Sq. Miles)	(Acres)	(Miles)
	Escherichia coli - Total Impaired Size by Water Type:			11.90

Sources:

Source Unknown

Final 2016



Chowan River and Dismal Swamp Basins

Cause Group Code: K19R-03-DO Buckskin Creek

Location: Buckskin Creek from the confluence with XHW to the second downstream tributary.

City / County: Dinwiddie Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

During the 2012 cycle, the portion of Buckskin Creek downstream of tributary XHW was impaired of the Aquatic Life Use due to a dissolved oxygen exceedance rate of 6/12 at 5ABSK008.75, which is located at Rt. 692.

During the 2016 cycle the segment was extended downstream to include station 5ABSK007.40. Both stations are impaired for the Aquatic life use due to DO violations with exceedance rate of 3/24 at station 5ABSK007.40 and 9/24 at station 5ABSK008.75. Both stations are also impaired for the recreation use due to E.coli violations.

Buckskin Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

1.96

Sources:

Dam or Impoundment Natural Conditions - Water
Quality Standards Use

Quality Standards Use Attainability Analyses

Needed

Source Unknown

Final 2016



Chowan River and Dismal Swamp Basins

Cause Group Code: K19R-04-HG Nottoway River and Tributaries

Location: The Nottoway River from the confluence with the Blackwater River at the Virginia-North Carolina state line upstream to State

Route 619 near Purdy, including its tributaries Assamoosick Swamp, Three Creek up to I-95, Rowanty Creek and

tributaries, Hatcher Run to I-85, and Arthur Swamp to I-85.

City / County: Dinwiddie Co. Emporia City Greensville Co. Prince George Co. Southampton Co.

Sussex Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

During the 2008 cycle, the Nottoway River from the confluence with the Blackwater River at the Virginia-North Carolina state line upstream to State Route 619 near Purdy, including its tributary Assamoosick Swamp, was considered impaired of the Fish Consumption Use due to a VDH fish consumption advisory for mercury. Three Creek up to I-95, Rowanty Creek and its tributaries, Hatcher Run up to I-85, and Arthur Swamp up to I-85 were added to the advisory during the 2010 cycle. No more than two meals/mouth of largemouth bass, smallmouth bass, bowfin, redhorse sucker species, longnose gar, channel catfish, chain pickerel, or sunfish species are recommended.

The advisory was based on exceedances of TSVs and TVs at several DEQ fish tissue monitoring stations, including 5ANTW091.70, 5ANTW075.48, 5ANTW077.95, 5ANTW045.45, 5AASM013.36, 5AROW002.41, 5AATH006.56, and 5AHRA004.16.

Nottoway River and Tributaries

Fish Consumption

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

186.50

Sources:

Atmospheric Deposition -

Source Unknown

Toxics



Chowan River and Dismal Swamp Basins

Cause Group Code: K19R-05-BEN XEJ - Nottoway River, UT

Location: An unnamed tributary (XEJ) of the Nottoway River in its entirety.

City / County: Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

During the 2008 cycle, the segment was assessed as impaired of the Aquatic Life Use due to an impaired benthic community at station 5AXEJ001.73 in 2001.

XEJ - Nottoway River, UT

Aquatic Life

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

2.88

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K19R-06-BEN Nottoway River

Location: The Nottoway River from Buckskin Creek downstream to the confluence with an unnamed tributary located near the

Dinwiddie/Sussex Co. line

City / County: Brunswick Co. Dinwiddie Co. Greensville Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

This segment of the Nottoway River was assessed as impaired of the Aquatic Life Use during the 2008 cycle due to benthic monitoring in Fall 2003 at freshwater probabilistic station 5ANTW097.27.

Nottoway River

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 1.04

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K19R-07-DO XAD - Buckskin Creek, UT

Location: Tributary XAD from its headwaters to its mouth at Buckskin Creek.

City / County: Dinwiddie Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2012 cycle, the tributary XAD was impaired of the Aquatic Life Use due to a dissolved oxygen exceedance rate of 4/12 at 5AXAD001.59, which is located at the Rt. 1 bridge.

During the 2016 cycle the segment remained impaired of the Aquatic Life Use due to a dissolved oxygen exceedance rate of 5/24 at 5AXAD001.59.

XAD - Buckskin Creek, UT

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)
Oxygen, Dissolved - Total Impaired Size by Water Type: 2.90

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K19R-08-DO XHW - Buckskin Creek, UT

Location: Tributary XHW from its headwaters to its mouth at Buckskin Creek.

City / County: Dinwiddie Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

During the 2012 cycle, the tributary XHW was impaired of the Aquatic Life Use due to a dissolved oxygen exceedance rate of 5/11 at 5AXHW000.38, which is located at the Rt. 692 bridge.

During the 2016 cycle the segment was impaired of the Aquatic Life Use due to a dissolved oxygen exceedance rate of 5/19 at 5AXHW000.38.

XHW - Buckskin Creek, UT

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

1.63

Sources:

Dam or Impoundment Natural Conditions - Water

Quality Standards Use Attainability Analyses

Needed

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K19R-09-BAC XHX - Buckskin Creek, UT

Location: Tributary XHX from its headwaters to its mouth at Buckskin Creek.

City / County: Dinwiddie Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2012 cycle, the tributary XHX was impaired of the Recreation Use due to an E. coli exceedance rate of 2/9 at 5AXHX001.19, which is located at the Rt. 709 bridge.

During the 2016 cycle the segment was impaired of the Recreation Use due to an E. coli exceedance rate of 5/21 at 5AXHX001.1

XHX - Buckskin Creek, UT

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 2.66

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K19R-10-BAC XHY - Buckskin Creek, UT

Location: Tributary XHY from its headwaters to its mouth at Buckskin Creek.

City / County: Dinwiddie Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2012 cycle, the tributary XHY was impaired of the Recreation Use due to an E. coli exceedance rate of 3/11 at 5AXHY001.08, which is located south of Route 40.

XHY - Buckskin Creek, UT

Recreation

Reservoir River
(Sq. Miles)

(Acres)

(Miles)

Escherichia coli - Total Impaired Size by Water Type:

1.61

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K19R-11-BAC Moores Swamp

Location: Headwaters to the start of PWS

City / County: Greensville Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment was impaired for Recreation use due to an E.coli impairment at station 5AMRS002.31 with

a violation rate of 6/12.

Moores Swamp

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

5.08

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K21R-03-HG Stony Creek

Location: Stony Creek from Mortar Branch downstream to its mouth.

City / County: Dinwiddie Co. Sussex Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

During the 2010 cycle, Stony Creek from Mortar Branch to its mouth was assessed as not supporting of the Fish Consumption Use due to mercury exceedances in flier sunfish and spotted bass during DEQ's 2007 fish tissue sampling.

Stony Creek Estuary Reservoir River Fish Consumption (Sq. Miles) (Acres) (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

8.35

Sources:

Atmospheric Deposition -

Source Unknown

Toxics



Chowan River and Dismal Swamp Basins

Cause Group Code: K21R-05-BAC Mortar Branch

Location: Headwaters to mouth at Stony Creek

City / County: Dinwiddie Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2014 cycle, Mortar Branch was assessed as impaired of the Aquatic Life Use due to an E. coli exceedance rate of 4/11 at station 5AMTR001.65, which is located at the Route 626 bridge.

Mortar Branch
Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

6.12

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K21R-05-DO Mortar Branch

Location: Headwaters to mouth at Stony Creek

City / County: Dinwiddie Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2014 cycle, Mortar Branch was assessed as impaired of the Aquatic Life Use due to a dissolved oxygen exceedance rate of 3/11 at station 5AMTR001.65, which is located at the Route 626 bridge.

Mortar Branch

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

6.12

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K21R-05-PH Mortar Branch

Location: Headwaters to mouth at Stony Creek

City / County: Dinwiddie Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

During the 2014 cycle, Mortar Branch was assessed as impaired of the Aquatic Life Use due to a pH exceedance rate of 5/11 at station 5AMTR001.65, which is located at the Route 626 bridge.

Mortar Branch
Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

6.12

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K21R-06-BAC Stony Creek

Location: Mortar Branch to Snake Branch

City / County: Dinwiddie Co. Sussex Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment became impaired for the recreation use due to E.coli exceedances of 3/12.

Stony Creek
Recreation
Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 2.60

Sources:

Source Unknown

Final 2016



Chowan River and Dismal Swamp Basins

Cause Group Code: K21R-07-PH Chamberlains Bed

Location: Start of unnamed pond to the mouth at Stony Creek

City / County: Dinwiddie Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

During the 2016 cycle the segment was impaired for Aquatic Life use due to a exceedance of pH (2/12).

Chamberlains Bed

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

1.32

Sources:

Natural Sources



Chowan River and Dismal Swamp Basins

Cause Group Code: K21R-08-DO Chamberlains Bed

Location: Headwaters to Wheelers Pond

City / County: Dinwiddie Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2016 cycle the segment was impaired for Aquatic Life use due to a exceedance of DO (3/11).

Chamberlains Bed

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

2.82

Sources:

Natural Sources



Chowan River and Dismal Swamp Basins

Cause Group Code: K21R-08-PH Chamberlains Bed

Location: Headwaters to Wheelers Pond

City / County: Dinwiddie Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

During the 2016 cycle the segment was impaired for Aquatic Life use due to a exceedance of pH (5/11).

Chamberlains Bed

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

2.82

Sources:

Natural Sources



Chowan River and Dismal Swamp Basins

Cause Group Code: K22R-03-BAC Sappony Creek (partial Delist 9.18mi(upper portion)

Location: Sappony Creek from UT at powerline downstream to Spiers Pond.

City / County: Dinwiddie Co. Sussex Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Sappony Creek from the headwaters to Spiers Pond was assessed as impaired of the Recreation Use during the 2006 due to an E. coli violation rate of 3/12 at 5ASAP005.54. In the 2010 cycle, the impairment was shortened to begin at Mill Run Branch because the E. coli rate at 5ASAP013.69 was acceptable (1/20). The violation rate was 3/13 during the 2012 cycle; therefore, the segment was returned to its original length.

No additional data was collected in the 2014 cycle.

During the 2016 cycle the segment was shortened and split to exclude the headwaters portion which was no longer impaired for E.coli. This portion remains impaired for Recreation use due to an E.coli violation of 5/23 at station 5ASAP013.69.

Sappony Creek (partial Delist 9.18mi(upper portion) Estuary Reservoir River (Sq. Miles) (Acres) (Miles) Recreation 11.86

Escherichia coli - Total Impaired Size by Water Type:

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K22R-04-BAC Sappony Creek

Location: Spiers Pond Dam to mouth at Stony Creek

City / County: Dinwiddie Co. Sussex Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment became impaired for the Recreation Use due to an E.coli violation rate of 4/23.

Sappony Creek

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 4.35

Sources:

Agriculture Non-Point Source Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K23R-01-BAC Arthur Swamp

Location: Arthur Swamp

City / County: Dinwiddie Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment became impaired for Recreation use due to E.coli exceedances (2/12).

Arthur Swamp

Recreation

Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

8.38

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K23R-02-BAC Joseph Swamp

Location: The mainstem of Joseph Swamp.

City / County: Prince George Co. Sussex Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2010 cycle, Joseph Swamp was assessed as not supporting of the Recreation Use due to an E. coli exceedance rate of 2/9 at 5AJOE003.92, which is located at Rt. 602.

Joseph Swamp

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

11.22

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K23R-04-BAC Jones Hole Sw/Moores Sw and all tribs(ptl Delist 4.2&9.11mi)

Location: Jones Hole Swamp/Moores Swamp and tributaries from the mouth at the Nottoway River to their headwaters.

City / County: Dinwiddie Co. Prince George Co. Sussex Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2010 cycle, the Jones Hole Swamp watershed was assessed as not supporting of the Recreation Use due to an E. coli exceedance rate of 5/22 at 5AJNH001.73, which is located at the Route 637 bridge.

The violation rate was 6/24 during the 2014 cycle.

During the 2016 cycle the segment was split to remove the headwaters portion of Jones Hole Swamp (VAP-K23R_JNH01B16 and VAP-K23R_JNH01C16) The lower portion remains impaired for recreation use due to E.coli violations at every station.

Jones Hole Sw/Moores Sw and all tribs(ptl Delist 4.2&9.11mi)

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Escherichia coli - Total Impaired Size by Water Type:

70.67

Sources:

Recreation

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K23R-05-BAC Gosee Swamp and Tributaries

Location: Gosee Swamp/Indian Creek and all of its tributaries below rivermile 6.88

City / County: Prince George Co. Sussex Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2014 cycle, lower Gosee Swamp was assessed as not supporting of the Recreation Use due to an E. coli exceedance rate of 2/12 at 5AGSE001.35, which is located at the Rt. 602 bridge.

No new data since 2014 cycle.

Gosee Swamp and Tributaries

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

27.71

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K23R-10-BAC Rowanty Creek

Location: Rowanty Creek mainstem downstream of Gravelly Run.

City / County: Dinwiddie Co. Prince George Co. Sussex Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2012 cycle, Rowanty Creek from Little Cattail Creek to the mouth was assessed as impaired of the Recreation Use due to an E. coli exceedance rate of 2/12 at 5AROW004.72, which is located at the Route 618 bridge. Continued monitoring was recommended to confirm the impairment because all other stations in the segment were acceptable.

Additional monitoring was conducted in the 2014 cycle at station 5AROW013.14, which is located at the Route 605 bridge. The exceedance rate was unacceptable (3/24); therefore, the segment was extended upstream to Gravelly Run.

During the 2016 cycle E.coli monitoring continued to be impaired.

Rowanty Creek
Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

14.07

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K24R-03-BAC Hunting Quarter Swamp

Location: The mainstem of Hunting Quarter Swamp.

City / County: Sussex Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2008 cycle, Hunting Quarter Swamp was assessed as impaired of the Recreation Use due to an E. coli violation rate of 2/14 at the Route 642 bridge (5AHQS006.22). Additional monitoring during the 2014 cycle indicated an acceptable exceedance rate (1/12); therefore, the stream will be delisted.

During the 2016 cycle the segment became impaired for Recreation Use due to exceedances in E.coli with a violation rate of 4/24 at station 5AHQS006.22, and 5/12 at station 5AHQS009.57.

Hunting Quarter Swamp

Recreation

Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

16.67

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K24R-04-BAC Nottoway River

Location: Nottoway River from route 40 bridge downstream to Three Creek

City / County: Southampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment was impaired for the Recreation use due to E.coli exceedances at station 5ANTW052.83

Nottoway River

Estuary Reservoir River

Recreation (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

15.61

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K24R-05-BAC Thweatt Branch Tributaries

Location: Thweatt Branch entirely

City / County: Southampton Co. Sussex Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle the segment was split from VAP-K24R_HQS01B08. Station 5ATWT001.19 was impaired for the

Recreation Use due to E.coli exceedances 4/11.

Thweatt Branch Tributaries

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

7.26

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K27R-03-BEN Applewhite Swamp

Location: This cause encompasses the area from the start of swamp (near Harrells Mill) downstream to confluence with Three Creek.

Located south of Mason & northeast of Arringdale.

City / County: Southampton Co. Sussex Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use impairment is retained based on the Benthic population rating from the Benthic ProbMon-Benthic IM [MI:S&F-'01, S&F-'02]. No data within Assessment window. Impairment retained until new data collected.

Applewhite Swamp

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 8.16

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K27R-05-BEN Three Creek - Upper

Location: This cause encompasses the area from the confluence of Chatman Branch (RM 19.26) downstream to above Southampton

Correctional Farm at Rt 308 crossing (RM 10.4).

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use impairment is retained from the 2004 Assessment based on benthic monitoring assessment which indicates impairment (MI in Fall-'04] based on data at DEQ (AQM & Bio) station @ 5ATRE016.02.

Three Creek - Upper Estuary Reservoir River
Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 9.17

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K28R-01-DO Mill Swamp

Location: This cause encompasses the Main stem of Mill Swamp only, from headwaters downstream to the confluence with the

Nottoway River. Tributary to Nottoway R, downstream of PWS. W of Delaware.

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

The Aquatic Life Use is impaired based on the dissolved oxygen exceedances at Station 5AMSP000.16 (3 violates/ 12 obs.).

Mill Swamp

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

10.49

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K28R-02-BEN Buckhorn Swamp

Location: This cause encompasses the segment of Buckhorn Swamp that is near Pope Count, segment is located between State Hwy

652 and US Hwy 58. Segment ends below State Hwy 657.

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on the Benthic population rating from the Benthic ProbMon-sample events [MI:F-'06, VI:S-'06] at Station 5ABKH005.16.

Buckhorn Swamp

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 5.68

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K28R-04-BEN Unnamed Tributary to Mill Swamp

Location: This cause encompasses the tributary running S / SE from Mill Swamp to the east of Darden Pond and crosses RT 749

perpendicular.

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Benthic data is impaired at station 5AXEC000.76 (X-Trib to Mill Swamp). Spring Score 2012 = 17.1, Fall Score 2012 = 37.5. This was a 2012 probabilistic monitoring site. This stream has very steep banks but is very shallow with loosely packed sediment and little habitat available for benthic organisms to colonize. Assessed with VCPMI score.

Unnamed Tributary to Mill Swamp

Aquatic Life

Estuary (Sq. Miles) Reservoir (Acres)

River (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

1.85

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K28R-05-BAC Buckhorn Swamp

Location: This cause encompasses the segment of Buckhorn Swamp near Pope that crosses over Route 652.

City / County: Southampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired based on E.coli data collected at Station 5BKH003.89 with 2 viol / 12 obs.

Buckhorn Swamp

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

4.22

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K28R-05-DO Buckhorn Swamp

Location: This cause encompasses the segment of Buckhorn Swamp near Pope that crosses over Route 652.

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

Aquatic Life Use is impaired based on DO at Station 5BKH003.89 with 4 viol / 12 obs. The DO impairment is thought to be from natural conditions. There is currently no natural conditions report.

Buckhorn Swamp

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

4.22

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2016



Chowan River and Dismal Swamp Basins

Cause Group Code: K28R-05-PH Buckhorn Swamp

Location: This cause encompasses the segment of Buckhorn Swamp near Pope that crosses over Route 652.

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

pH is impaired with 3 viol/24 obs at station 5ABKH003.89. Impairment thought to be from natural causes.

Buckhorn Swamp

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

4.22

Sources:

Naturally Occurring Organic Acids



Chowan River and Dismal Swamp Basins

Cause Group Code: K28R-06-DO Nottoway Swamp

Location: This cause encompasses the segment of Nottoway Swamp near Route 611.

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

Aquatic Life Use is impaired based on DO and pH exceedances at Station 5ANT002.96. DO - 5 viol / 11 obs and pH 8 viol / 11

obs.

Nottoway Swamp

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

8.12

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K28R-06-PH Nottoway Swamp

Location: This cause encompasses the segment of Nottoway Swamp near Route 611.

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

Aquatic Life Use is impaired based on DO and pH exceedances at Station 5ANT002.96. DO - 5 viol / 11 obs and pH 8 viol / 11

obs.

Nottoway Swamp

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

8.12

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K29R-02-BAC Assamoosick Swamp

Location: Assamoosick Swamp from rivermile 2.5 near Mill Run downstream to its mouth

City / County: Southampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2010 cycle, Assamoosick Swamp from rivermile 2.5 near Mill Run downstream to its mouth was assessed as not supporting of the Recreation Use due to an E. coli exceedance rate of 2/11 at 5AASM000.89, which is located at the Route 647

bridge.

Assamoosick Swamp

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

2.46

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K29R-03-BAC XGT - Assamoosick Swamp, UT

Location: The UT XGT from its headwaters to its mouth at Assamoosick Swamp.

City / County: Southampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2010 cycle, the segment was assessed as not supporting of the Recreation Use due to an E. coli exceedance rate of 2/6 at 5AXGT000.50, which is located at the Route 607 bridge.

XGT - Assamoosick Swamp, UT

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

1.93

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K30R-01-DO Darden Mill Run

Location: This cause encompasses the area from headwaters near Newsoms downstream to Windbourne Millpond, near VA/NC state

line

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

Aquatic Life Use is impaired due to depressed DO & pH concentrations below the criteria minimum. Impairment is suspected due to natural swamp conditions present in these waters, low flow and high organic content. Below criteria minimum = $4.0 \, \text{mg/l}$. DO = $18 \, \text{viol} / 33 \, \text{obs}$ and pH $25 \, \text{viol} / 33 \, \text{obs}$.

Darden Mill Run

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

10.72

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K30R-01-PH Darden Mill Run

Location: This cause encompasses the area from headwaters near Newsoms downstream to Windbourne Millpond, near VA/NC state

line.

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

Aquatic Life Use is impaired due to depressed DO & pH concentrations below the criteria minimum. Impairment is suspected due to natural swamp conditions present in these waters, low flow and high organic content. Below criteria minimum = $4.0 \, \text{mg/l}$. DO = $18 \, \text{viol} / 33 \, \text{obs}$ and pH $25 \, \text{viol} / 33 \, \text{obs}$.

Darden Mill Run

Estuary Reservoir River
Aquatic Life

(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

10.72

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2016



Chowan River and Dismal Swamp Basins

Cause Group Code: K30R-02-DO Nottoway River - Lower

Location: This cause encompasses the lower portion of the Nottoway River in watershed K30. Segment starts below Mill Creek near

Point Beach to VA/NC state line.

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

DO is not supporting (4 viol / 36 obs) @ 5ANTW003.30 / Special Study and Trend Station.

Nottoway River - Lower Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

4.54

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K30R-04-BAC Nottoway River - Upper

Location: This cause encompasses the upper portion of Nottoway River in watershed K30. Segment begins at upstream intersection

with watershed boundary (NW of Delaware) downstream below Route 671.

City / County: Southampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Recreation is impaired based on E coli data from station 5ANTW014.99 with 5 viol/32 obs

Nottoway River - Upper Estuary Reservoir River
Recreation (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

0.45

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K32R-01-BEN Blackwater River - Lower

Location: This cause encompasses the lower portion of Blackwater River in K32. Starts at the confluence with Cypress Swamp

(upstream of Walls Bridge) downstream to above Rt 617 crossing @ Walls Bridge (RM 58.22).

City / County: Isle Of Wight Co. Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on benthic data collected at stations 5ABLW052.91 and 5ABLW055.26.

Blackwater River - Lower Estuary Reservoir River
Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

2.32

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K32R-13-HG Blackwater River Basin

Location: Blackwater River and tributaries from its headwaters to the VA-State Line

City / County: Dinwiddie Co. Isle Of Wight Co. Petersburg City Prince George Co. South Boston City

Southampton Co. Suffolk City Surry Co. Sussex Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

During the 2006 cycle, the Blackwater River from Route 31 near Dendron downstream to the Virginia-North Carolina state line was assessed as impaired of the Fish Consumption Use due to a VDH fish consumption advisory for mercury.

During the 2008 cycle, the advisory was expanded on 8/31/2007 to include the Blackwater River to its headwaters, including all of its tributaries. The advisory currently recommends consuming no more than two meals/month of largemouth bass, sunfish species, bowfin, chain pickerel, white catfish, redhorse sucker and longnose gar.

The advisory is based on the results of DEQ's fish tissue monitoring program, which show mercury exceedances at multiple stations throughout the watershed, including 5ABKR003.68, 5ABKR002.33, 5AWKS013.53, 5ASEC005.39, 5ABLW074.66, 5ACPP004.04, 5ACPP007.86, 5AJCH000.73.

Blackwater River Basin Estuary Reservoir River

Fish Consumption (Sq. Miles) (Acres) (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type: ######

Sources:

Atmospheric Deposition - Source Unknown

Toxics



Chowan River and Dismal Swamp Basins

Cause Group Code: K32R-18-BEN Blackwater River, UT

Location: Unnamed tributary XFM from its headwaters to its mouth at Blackwater River

City / County: Sussex Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

During the 2008 cycle, the tributary was assessed as not supporting the Aquatic Life Use due to impairment of the benthic community at station 5AXFM000.88, which is located at the Route 613 bridge.

Blackwater River, UT

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

3.13

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K33R-02-BAC Blackwater River - Middle

Location: This cause encompasses the middle portion of Blackwater River from Rt 460 bridge crossing, RM 40.22 to downstream

approx. halfway between Station 5ABLW040.22 and Station 5ABLW038.69.

City / County: Isle Of Wight Co. Southampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Recreational Use is not supported with 6 viol / 34 obs at station 5ABLW040.22 (K33R-02-BAC)

Blackwater River - Middle Estuary Reservoir River Recreation (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

1.04

Sources:

Source Unknown



19.10

Chowan River and Dismal Swamp Basins

Cause Group Code: K33R-02-BEN Blackwater River - Upper

Location: This cause encompasses the upper portion of Blackwater R. in K33. Starts at the Rt 617 crossing (Walls Bridge, RM 58.22)

downstream to above Rt 460 crossing @ Zuni (RM 40.23).

City / County: Isle Of Wight Co. Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Benthic impairment is retained from 2008 Assessment. No new benthic data within the assessment window. Previous impairment is from benthic data collected at stations 5ABLW052.91 and 5ABLW055.26.

Blackwater River - Upper Estuary Reservoir River
Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K33R-03-BEN Blackwater River - Lower and Burnt Mills Swamp

Location: This cause encompasses the lower portion of the Blackwater River from RM 39.34 to the confluence with Antioch Swamp as

well as the entirety of Burnt Mills Swamp

City / County: Isle Of Wight Co. South Boston City Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Benthic impairment identified at DEQ (ProbMon) station 5ABLW038.69. Station 5ABLW038.69 Benthic IM [MI: S&F '05] and

5ABMS000.80 [VI: S&F 10].

Blackwater River - Lower and Burnt Mills Swamp

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

9.34

Sources:

Aquatic Life

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K35L-01-DO Airfield Pond

Location: This cause encompasses the Pond north of Lightwood Swamp, off of State Route 628.

City / County: Sussex Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

Aquatic Life Use is impaired for dissolved oxygen based on the Class III DO water quality criteria. Data from station 5ALTD005.10 has 15 viol / 42 obs for Dissolved Oxygen.

Airfield Pond Estuary Reservoir River
Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

120.07

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed **Natural Sources**



Chowan River and Dismal Swamp Basins

Cause Group Code: K35L-01-HG Airfield Pond

Location: This cause encompasses all of Airfield Pond north of Lightwood Swamp off of State Route 628.

City / County: Sussex Co.
Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

The Fish Consumption Use is impaired based on Fish Tissue data from 2006 at Station 5ALTD005.10. Fish Tissue data Impaired for Hg for fish species Brown Bullhead Catfish, Largemouth Bass, Chain Pickerel, Bowfin & Bluegill Sunfish. The VDH Fish Advisory is for all of Blackwater and its tributaries as stated on 10/29/03, modified 7/27/05 and again on 8/31/07.

Airfield Pond Estuary Reservoir River Fish Consumption (Sq. Miles) (Acres) (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type: 120.07

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K35L-01-PH Airfield Pond

Location: This cause encompasses the Pond north of Lightwood Swamp, off of State Route 628.

City / County: Sussex Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

Aquatic Life Use is impaired for pH based on data from station 5ALTD005.10 with 5 viol/ 42 obs for pH based on Class III water quality criteria.

Airfield Pond Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

120.07

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed **Natural Sources**

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Chowan River and Dismal Swamp Basins

Cause Group Code: K35R-02-BAC Seacock Swamp - Lower

Location: This cause encompasses the lower portion of Seacock swamp south of Doles Crossroads, west of State Hwy 600.

City / County: Southampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 5A

Recreational Use impairment is retained. Need new E.coli data.

2006 01557 / 2008 K35R-02-BAC

Seacock Swamp - Lower

Recreation

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

2.59

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K35R-02-BEN Seacock Swamp - Lower

Location: This cause encompasses the lower portion of Seacock swamp

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on benthic assessment at station 5ASCK003.84 Benthic IM [MI: S-'04]. There is insufficient data to assess DO or pH.

Seacock Swamp - Lower

Aquatic Life

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

2.59

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K35R-03-BAC **UT Seacock Swamp**

Location: This cause encompasses the UT to Seacock Swamp, PRO CAFO special study. Headwaters to confluence with Seacock

Swamp mainstem.

City / County: Surry Co.

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 5A

Recreational Use is not supported based on data over 5 years old (2004 IR FC data: 6 viol / 7 obs.) at 5AXDY000.96. The

impaired status was retained from previous Fecal Coliform data.

Confined animal operations are present in the watershed.

UT Seacock Swamp

Estuary Reservoir River (Sq. Miles) (Acres) (Miles) Recreation

Fecal Coliform - Total Impaired Size by Water Type:

1.02

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K35R-04-BAC UT Airfield Pond - Lower

Location: This cause encompasses the UT at the confluence with segment VAT-K35R_XDZ01A04 halfway between State Hwy 622

and 729 downstream to Airfield Pond.

City / County: Sussex Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Listed in 2004 as Impaired for Fecal Coliform. The TMDL date is retained for the E.coli impairment of 2016.

UT Airfield Pond - Lower Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

0.71

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K35R-05-BAC **UT Airfield Pond - Upper**

Location: This cause encompasses UT to Airfield Pond, PRO CAFO special study. Headwaters to confluence with UT VAT-

K35R XDZ02A04.

City / County: Sussex Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

No new data for 2016 cycle. Recreation Use impairment is retained. Station 5AXDZ001.73 for E.coli with 4 viol/ 6 obs. Previous Fecal Coliform data impairment (TMDL ID: VAT-K41R-05) based on fecal Coliform (13 violates / 16 observations). TMDL due date retained per H. Augustine e-mail 2/6/06.

UT Airfield Pond - Upper

Recreation

Estuary Reservoir (Sq. Miles) (Acres)

River (Miles)

Escherichia coli - Total Impaired Size by Water Type:

0.68

Sources:

Animal Feeding Operations

Source Unknown

(NPS)



Chowan River and Dismal Swamp Basins

Cause Group Code: K35R-06-BAC Seacock Swamp - Upper and Lower

Location: This cause encompasses the upper portion of Seacock Swamp between Drumwright Pond and approximately 0.2 mi east of Rt. 628 and lower Seacock Swamp between the confluence of Brantley Swamp and the confluence with Round Hill Swamp.

City / County: Southampton Co. Surry Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A Fecal Coliform / 5A

The Recreational Use is impaired based on Fecal Coliform data retained since no E.coli data collected. Station 5ASCK018.65 in 2006 (2 violations / 8 observations) for Fecal Coliform.

Seacock Swamp - Upper and Lower Recreation	,	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaire	Escherichia coli - Total Impaired Size by Water Type:		2.50
Seacock Swamp - Upper and Lower	Estuary F	Reservoir	River
Recreation	(Sq. Miles)	(Acres)	(Miles)
Fecal Coliform - Total Impaire	ed Size by Water Type:		0.84

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K35R-08-BEN Round Hill Swamp

Location: The cause encompasses Round Hill Swamp between the confluence with Seacock Swamp and Rt. 623

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Aquatic Life Use is impaired based on benthic impairments (Benthic ProbMon-Benthic IM [MI: S-'05] at station 5ARHS000.39.

2008 K35R-08-BEN

Round Hill Swamp

Round Till Swamp

Aquatic Life

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

0.64

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K36R-02-BAC Blackwater River - Lower Middle

Location: This cause encompasses the lower Blackwater River from RM 13.76 (downstream of Franklin, confluence of UT, parallel to

Hayden High School) downstream west of Union Camp Holding Pond.

City / County: Isle Of Wight Co. Southampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired based on E.coli data.

DEQ (AQM) stations:

5ABLW011.48 (0 viol / 6 obs) - There has been no new data at this station since 2009. Therefore, it cannot confidently be assessed as supporting and split

Blackwater River - Lower Middle

Estuary Reservoir River

Recreation (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

2.83

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K36R-02-BEN **Black Creek**

Location: This cause encompasses the Black Creek Located NW of Burdette, From Wades Pond downstream to mouth, Tributary to

Blackwater R. with confluence at RM 22.0.

City / County: Southampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use impairment is retained based on the Benthic data collected at Station 5ABLC000.88 (Benthic ProbMon-

Benthic IM [MI: F-'03, VI: S-'03]).

Black Creek Estuary Reservoir River (Sq. Miles) (Acres) (Miles) **Aquatic Life**

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

4.95

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K36R-04-BAC Cypress Swamp

Location: This cause encompasses Cypress Swamp from town of Sedley downstream to Route 611.

City / County: Isle Of Wight Co. Southampton Co. Suffolk City

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired (5 violations / 23 observations) at Station 5ACYS001.92.

Cypress Swamp

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 5.16

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K36R-04-BEN Unsegmented Tributary to Blackwater

Location: This cause encompasses the Unsegmented River from Blackwater South of Franklin to North of State Hwy 58.

City / County: Southampton Co. Suffolk City

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on Benthic Impairments. The Benthic ProbMon is impaired [VI:S&F-'06, 07] AT DEQ (ProbMon) Station @ 5AXGI001.79.

Unsegmented Tributary to Blackwater

Aquatic Life

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

2.75

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K36R-05-BAC Washole Creek

Location: This cause encompasses the area at the confluence of Blackwater. East of Franklin Sewage Disposal. South of US Hwy 58.

City / County: Isle Of Wight Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use ins not supporting based on E.coli data (5 violations / 35 observations) at station 5AWAC000.30.

Washole Creek

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

0.55

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K36R-06-BAC Blackwater River - Lower Middle

Location: The cause encompasses the portion of the Blackwater River south of the Isle of Wight/ Suffolk line beginning at Rt 58

downstream near South Quay/

City / County: Isle Of Wight Co. Southampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired based on E.coli data (4 viol /34 obs) at DEQ (AQM) stations @ 5ABLW009.80.

Blackwater River - Lower Middle

Estuary Reservoir River

Recreation (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

0.77

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K36R-07-BAC Blackwater River - Upper

Location: This cause encompasses the Blackwater River segment north of Maynards Crossroads and State Hwy 630 and ends at

Joyners Bridge

City / County: Isle Of Wight Co. Southampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Recreation impaired with 4 viol/32 obs for E. coli at station 5ABLW022.84

Blackwater River - Upper Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

2.47

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K38R-01-BEN Somerton Creek

Location: This cause encompasses the area of Somerton Creek from 5 miles upstream from monitoring station (RM 10.36)

downstream to VA/NC state line.

City / County: Suffolk City

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on the Benthic Impairments at Station 5ASTN008.78. Station 5ASTN008.78 Benthic

IM [MI:F-'04].

Somerton Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

9.38

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K38R-02-BAC March Swamp

Location: This cause encompasses entirety of March Swamp. Northeast of Factory Hill. Northern tributary to Somerton Creek.

City / County: Suffolk City

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impairment is maintained based on the E.coli data exceedance of the swimming criteria indicator (1 violates /6 obs.) at Station 5AMAR001.65.

March SwampEstuaryReservoirRiverRecreation(Sq. Miles)(Acres)(Miles)

Escherichia coli - Total Impaired Size by Water Type:

7.71

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K38R-02-DO March Swamp

Location: This cause encompasses entirety of March Swamp. Northeast of Factory Hill. Northern tributary to Somerton Creek.

City / County: Suffolk City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

The Aquatic Life Use is impaired based on the depressed DO concentrations, impairment continued from 2004 IR. Data within assessment window is 1 viol /5 obs. No new data available.

March Swamp

Estuary Reservoir River

Aquatic Life

(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

7.71

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K38R-02-PH March Swamp

Location: This cause encompasses entirety if March Swamp. Northeast of Factory Hill. Northern tributary to Somerton Creek.

City / County: Suffolk City

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

The Aquatic Life Use is impaired based on depressed pH concentrations, impairment continued from 2004 IR. Station 5AMAR001.65 4 viol/ 11 obs.

March Swamp

Estuary Reservoir River

Aquatic Life

(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

7.71

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K38R-03-DO Chapel Swamp

Location: This cause encompasses the entirety of Chapel Swamp. Northern tributary of Somerton Creek. Located east of Cleopus.

City / County: Suffolk City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

Aquatic Life Use impaired due to depressed pH & DO concentrations, DEQ Station @ 5ACHP002.03. The pH has 2 viol / 6 obs and the DO has 2 viol / 6 obs. Both are impaired with data from 2012. Previously there was a continued impairment for the same from 2004 IR.

Chapel Swamp

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

8.28

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

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Chowan River and Dismal Swamp Basins

Cause Group Code: K38R-03-PH Chapel Swamp

Location: This cause encompasses the entirety of Chapel Swamp. Northern tributary of Somerton Creek. Located east of Cleopus.

City / County: Suffolk City

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

Aquatic Life Use impaired due to depressed pH & DO concentrations, DEQ Station @ 5ACHP002.03. The pH has 2 viol / 6 obs and the DO has 2 viol / 6 obs. Both are impaired with data from 2012. Previously there was a continued impairment for the same from 2004 IR.

Chapel Swamp

Reservoir River

Aquatic Life

(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

8.28

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chowan River and Dismal Swamp Basins

Cause Group Code: K38R-04-BAC Unsegmented rivers in K38R

Location: This cause encompasses the Non-segmented areas of K38

City / County: Suffolk City

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation is impaired with 2 viol / 6 obs for E. Coli @ DEQ Station 5AJNS001.89.

Unsegmented rivers in K38R Estuary Reservoir River Recreation (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

1.80

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K38R-05-BAC Chapel Swamp

Location: This cause encompasses the Northern tributary of Somerton Creek. Located east of Cleopus. Entirety of swamp.

City / County: Suffolk City

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Recreation Use is impaired with 2 viol / 6 obs.

Chapel SwampEstuaryReservoirRiverRecreation(Sq. Miles)(Acres)(Miles)

Escherichia coli - Total Impaired Size by Water Type:

8.28

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K38R-06-BAC Somerton Creek

Location: This cause encompasses Somerton Creek from 5 miles upstream from monitoring station (RM 10.36) downstream to VA/NC

state line

City / County: Suffolk City

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Recreation Use impaired based on E. coli data from station 5ASTN008.78 with 6 viol/34 viol.

Somerton CreekEstuaryReservoirRiverRecreation(Sq. Miles)(Acres)(Miles)

Escherichia coli - Total Impaired Size by Water Type:

9.38

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K39L-01-HG Lake Drummond

Location: This cause encompasses the entirety of lake Drummond within the Great Dismal Swamp National Wildlife Refuge. Located

on City of Suffolk/City of Chesapeake boundary near NC state line.

City / County: Chesapeake City Suffolk City

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for Bowfin and Chain Pickerel (issued 10/2003 & modified 7/27/05, 8/31/2007 recommending no more than two meals/month due to Hg reported in fish tissue).

Lake Drummond Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type: 3,241.96

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K39L-01-PH Lake Drummond

Location: This cause encompasses the entirety of lake Drummond within the Great Dismal Swamp National Wildlife Refuge. Located

on City of Suffolk/City of Chesapeake boundary near NC state line.

City / County: Chesapeake City Suffolk City

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

The Aquatic Life Use is impaired based on the pooled pH exceedance of the criteria for this parameter with a violation rate of

99.2% (121 violates/122 obs.).

Lake Drummond Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type: 3,241.96

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K39R-01-HG Dismal Swamp Canal & Feeder Ditch to Lake Drummond

Location: This cause encompasses the Dismal Swamp Canal from Deep Creek Locks to VA/NC state line and including Feeder Ditch

to Lake Drummond and unsegmented rivers in K39R.

City / County: Chesapeake City

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for Bowfin and Chain Pickerel (issued 10/2003 & modified 7/27/05, recommending no more than two meals/month due to Hg reported in fish tissue).

Dismal Swamp Canal & Feeder Ditch to Lake Drummond

Fish Consumption

Estuary Res (Sq. Miles) (Ad

Reservoir (Acres)

River (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

13.21

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K39R-02-HG Unsegmented rivers in K39R

Location: This cause encompasses the non-segmented rivers-feeder ditches within K39.

City / County: Chesapeake City Suffolk City

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

The Fish Consumption Use impairment is retained. Data from Station 5B-GDS-ED has an observed effect for FT. 05-OE,

FT_Met-As Red Pickerel

Unsegmented rivers in K39R

Fish Consumption

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

15.28

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K40R-02-BAC Northwest River - Middle (PWS)

Location: This cause encompasses Northwest River from RM 16.63 (start of PWS) to RM 10.44. From start of PWS area, upstream of

Pine Grove Lane, downstream to Indian Cr. confluence.

City / County: Chesapeake City

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

E. coli data impaired with 5 viol/32 obs at station 5BNTW012.86

Northwest River - Middle (PWS)

Recreation

Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

6.33

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K40R-04-BAC Northwest River - Lower (PWS)

Location: This cause encompasses the Northwest River from RM 10.44 to the Indian Creek Confluence

City / County: Chesapeake City

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Recreation is impaired based on E. coli data at station 5BNTW010.23 with 4 viol/ 32 obs. There is an observed effect for E. coli at station 5BNTW009.49 with 3 viol/ 32 obs.

Northwest River - Lower (PWS)

Recreation

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Escherichia coli - Total Impaired Size by Water Type:

1.70

Sources:

Source Unknown



6.33

Chowan River and Dismal Swamp Basins

Cause Group Code: K40R-04-HG Northwest River - Middle

Location: This cause encompasses the Northwest River from RM 16.63 (start of PWS) to RM 10.44. From start of PWS area,

upstream of Pine Grove Lane, downstream to Indian Creek confluence.

City / County: Chesapeake City

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

The Fish Consumption Use is impaired based on FT data collected at Station 5BNTW011.90. The mercury Fish Tissue Value

was violated in 2007 (07-IM- FT_Met Hg Largemouth Bass & Bowfin).

Northwest River - Middle

Estuary Reservoir River

Fish Consumption (Sq. Miles) (Acres) (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K40R-09-BAC Indian Creek tributary to Northwest River

Location: From the St. Brides Rd. crossing downstream to the confluence with the Northwest River. Located southeast of Saint Brides.

City / County: Chesapeake City

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired based on E.coli data collected at station 5BIND001.15 with 7 viol / 31 obs.

Indian Creek tributary to Northwest RiverEstuaryReservoirRiverRecreation(Sq. Miles)(Acres)(Miles)

Escherichia coli - Total Impaired Size by Water Type:

3.46

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K41R-01-BEN Pocaty River

Location: This cause encompasses the Pocaty River and selected tribs. from headwaters at mile 3.92 to confluence with North

Landing River at mile 0.00.

City / County: Chesapeake City Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use impairment is retained based on benthic impairment. Data collected at station 5BPCT002.16 MI: S-03 and

VI: F-03.

Pocaty River

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

7.43

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K41R-05-PCB West Neck Creek - Middle

Location: This cause encompasses the area from south side of Princess Anne road crossing (RM 6.20) downstream to widening of

creek (RM 3.10) approx. 0.55 mi downstream of Indian River Road crossing.

City / County: Virginia Beach City

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Fish Consumption Use is impaired based on Fish Tissue data collected at Station 5BWNC003.65. 07-IM, FT_PCB White

Catfish, Carp & FT-OE, Met_As Carp.

West Neck Creek - Middle

Estuary Reservoir

Fish Consumption

(Sq. Miles) (Acres)

River (Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type:

2.74

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K41R-12-BEN Unnamed Trib to Milldam Creek

Location: This cause encompasses the area from the confluence with Milldam Creek to Crags Cswy.

City / County: Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

Aquatic Life

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Aquatic Life Use is not supported based on benthic data from Station 5BXAT000.30. Benthic IM [VI:S&F-09 & S-10; MI:F-10]

Unnamed Trib to Milldam Creek

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

0.66

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K41R-12-DO Unnamed Trib to Milldam Creek

Location: This cause encompasses the area from the confluence with Milldam Creek to Crags Cswy.

City / County: Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

Aquatic Life Use is not supported based DO data from Station 5BXAT000.30, DO with 4 viol / 4 obs.

Unnamed Trib to Milldam Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

0.66

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K41R-13-DO Blackwater Creek

Location: This cause encompasses the Blackwater Creek from headwaters at RM 3.2 to confluence with North Landing River RM 0.0.

City / County: Chesapeake City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

Dissolved oxygen is impaired. 4 viol/ 34 obs at station 5BBKW002.50.

Blackwater Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

4.47

Sources:

Source Unknown



Chowan River and Dismal Swamp Basins

Cause Group Code: K42E-06-PH Ashville Bridge Creek - Lower

Location: This cause encompasses the lower portion of Ashville Bridge Creek, between Hell Point and Muddy Creeks.

City / County: Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

The Aquatic Life Use impairment is retained based on pH concentrations from 2005-2006 with 1 viol / 15 obs. New data is needed to delist pH. Previous listing 4 violates/ 36 obs.

Ashville Bridge Creek - Lower

Aquatic Life

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

pH - Total Impaired Size by Water Type:

0.016

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

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Chowan River and Dismal Swamp Basins

Cause Group Code: K42E-07-DO Beggars Bridge Creek

Location: This cause encompasses the area located southeast of Dawley Corners, tributary to Shipps Bay. Segment begins at the

confluence of numerous unnamed tributaries (RM 1.34) near Dawley Corners and extends downstream to the mouth at the

confluence with Shipps Bay

City / County: Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

Dissolved oxygen is impaired. 4 viol/ 33 obs at station 5BBBC000.76.

Beggars Bridge Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.042

Sources:

Source Unknown